



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

*[Handwritten signature]*

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,623	07/13/2001	Stuart Asawaka	10011919-1	3732

7590            11/06/2006

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
----------

KOYAMA, KUMIKO C

ART UNIT	PAPER NUMBER
	2876

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/905,623	ASAWAKA, STUART
	Examiner Kumiko C. Koyama	Art Unit 2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 05 June 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 31 July 2001 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                        |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____   |

## DETAILED ACTION

Appeal Brief received on June 05, 2006 has been acknowledged.

Upon conducting an Appeal Conference with two Supervisory Patent Examiners and one Primary Examiner, it was discussed that Applicant's arguments with respect to independent claims 1, 9 and 19 were not found persuasive for the reasons provided in the Response to Arguments below. However, Applicant's arguments with respect to claim 12 were found persuasive, and therefore, Finality has been withdrawn and new grounds of reject have been provided below.

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 4, 9-11, 15 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (US 5,850,584).

Re claims 1, 9-11 and 19: Robinson teaches a printer system wherein with input from the operator by the UI 14, the image processing parameters of IPS 112 can be changed to produce different types/quality of images, which can be displayed on the UI 14 prior to printing. Using this ability to change image processing techniques, a range of image processing settings can be selected by the operator for a particular job or page (col 6, lines 27-34). Inputting by the operator

shows receiving a resource request at the printer, and the resource request including a request for at least one of use and a right of use of a selected at least one enhanced printer operational resource. Robinson further teaches that standard CMYK colorants are used, but non-standard or special colorants such as green and orange can be used to extend the printer gamut (col 7, lines 8-10). Such teaching teaches that the printer includes operation resources comprising core printer operation resources and enhanced printer operational resources. Robinson discloses that UI 14 enables an operator to control and monitor various operator adjustable functions and maintenance activities. The operator actuates the appropriate keys on UI 14 to adjust the parameters of a print job. The output signal from UI 14 is transmitted to ESS 11. ESS 11 is programmable microprocessor system. ESS 11 conventionally controls all machines steps and functions including operation of document feeders, document and print sheet deflectors or gates, sheet feeder drives, downstream finishing device etc. (col 3, lines 30-46). Robinson further discloses that documents transmitted from workstation 4 to ESS 11 are electronically generated or retrieved, and IPS 112 receives a contone image and decomposes the contone image to a raster image. IPS 112 transmits signal corresponding to the desired electronic or scanned image to ROS 16 to create the output print image (col 3, lines 62-col 4, lines 3). Such disclosure teaches operating the printer according to the resource request including at least one of use of and right of use of the selected at least one enhanced printer operational resource. Robinson also determining the cost of materials to be consumed based on the change of the at least one image processing parameters (col 6, lines 33-38 and col 8, lines 22-25), which teaches initiating a payment transaction based on the operating step, wherein the payment transaction includes a charge calculated as a function of enhanced printer operational resource request.

Re claim 3: Colorants are consumable elements.

Re claims 4 and 15: The use of non-standard or special colorants are enhanced outputs and the output with just the CMYK is an output without the enhanced source.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Pierce (US 6,202,057). The teachings of Robinson have been discussed above.

Robinson does not specifically teach that the printer initiates the payment transaction.

Pierce teaches that the printer module initiates a transaction by sending a request for evidence of payment and receives evidence of payment for subsequent printing, which shows a transaction control (col 4, lines 1-9).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Pierce to the teachings of Robinson such that the printer can request the user the appropriate charge for the use of the printer according to the resources and number of pages the user printed from the printer, and such modification provides a more accurate charge because the payment initiation is done in the printer and not elsewhere.

5. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Maruta et al (US 6,064,838). The teachings of Robinson have been discussed above..

Robinson does not specially disclose printer resolution.

Maruta discloses that a user sets the appropriate printing conditions such as sheet size, resolution of picture quality, the number of copies, and the like for color printer 804. The cost required for the printing operation is determined, and then a printing operation is executed (col 2, lines 25-32).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Maruta to the teachings of Robinson the picture quality increase by increasing the resolution of the image because fine resolution define smoother curves and lines.

6. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Hayashi (US 6,375,297). The teachings of Robinson have been discussed above.

Robinson fail to teach a printer throughput speed.

Hayashi teaches that the instruction receiving section 11 drives the print controller 1 as the information processor before printing commences and in turn the print controller 1 drives its display device to display a selection screen, which contain options of sizes and sorts of printing media, print quality modes (normal mode/high resolution mode), printing speed (moving velocity of the recording head), and others. The selection screen is presented to a printer operator or user for selection of his or her desired options (col 7, lines 50-58).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Hayashi to the teachings of Robinson because Hayashi's teachings contains additional resources not taught by Robinson, and therefore by integrating Hayashi into Robinson, the printer is capable of providing picture or enhanced quality of printing or faster printing capabilities.

7. Claims 7, 8 and 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Nocker (US 6,236,486). The teachings of Robinson have been discussed above.

Robinson fail to teach that the selected at least one printer resource comprises access to a selected communication channel and the selected communication channel comprises at least one of an IR link and a network link.

Nocker teaches that an optical communication channel is established so that data files and commands may be sent from the data-collection computer 10 directly to the printer 20.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Nocker to the teachings of Robinson and provide a communication channel comprising a network link in order to remotely print desired information by sending the information directly to the printer, which make the process faster.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Sugiura et al (US 4,393,375). The teachings of Robinson have been discussed above.

Robinson fails to teach a request to remove the at least one of the plurality of printer operational resources from the second set and place at least one of the plurality of printer operational resources in the first set.

Sugiura discloses a control system for use in a copy machines, which includes control keys for setting the operational mode of the machine and display devices for indicating the operational settings (col 1, lines 38-45). Sugiura discloses identifying individual instructions for setting a plurality of operational modes (col 1, lines 47-49). The copy machine can be subjectively standardized to a specified set of machine functions as desired by the user (col 3, lines 4-6). An operator will be given the opportunity to change the individual operating features of the standardized set by inputting overriding input commands signals into the machine (col 3, lines 6-10). Sugiura also discloses removing the specific second input command signals from the means for storing and reactivating the predetermined set of first command signals for each discrete operating feature (col 11, lines 45-50). Such disclosure teaches removing a printer operational resource and placing the printer operational resource.

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Sugiura to the teachings of Robinson and manually provide a request for removing and placing a printer operational resource because different users have a different printing plans and accounts for the printing charges, and therefore, there must be means to change the printing profile so that the a single printer can be used by multiple users and accommodating such users by having customized profile settings.

9. Claims 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson in view of Freeman (US 6,134,557). The teachings of Robinson have been discussed above.

Robinson fails to teach that the transaction control generates a use report for delivery to a resource vendor.

Freeman teaches printing a material supply list and transferring the generated list(s) to the vendor/merchant (col 2, lines 19-20).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to integrate the teachings of Freeman to the teachings of Robinson in order to inform the vendor which resources have been added to the printing so that the vendor can determine the appropriate charge and can analyze the type of resources that the consumers are demanding for, which leads to better business and accurate analysis.

*Response to Arguments*

10. Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed June 05, 2006 have been fully considered but they are not persuasive.

The Applicant submits that Robinson et al fails to distinguish between core printer operational resources and enhanced printer operational resources. However, the Examiner points out that the Applicant does not specifically claim the differences between the core printer operational resources and enhanced printer operational resources. The claim does not recite what is included in each of the core printer operational resource and the enhanced printer operational resource. As described in the rejection above, Robinson discloses that the cost of materials to be consumed is based on the change of the at least one image processing parameters. To be specific, Robinson discloses that using black to replace the CMY in a color image by UCR results in a less expensive print (col 7, lines 21-25). In this example, the black color can be considered as the

core printer operational resource and the CMY as the enhanced printer operational resource. Robinson also teaches the use of standard colorants and non-standard colorants or special colorants. In such case, the standard colorants are core printer operational resource and the special colorants as the enhanced printer operational resource. Since the present claims do not clearly distinguish what is contained in the core printer operational resource and in the enhanced printer operational resource, the Examiner believes that the claim itself does not explicitly state the distinction or division between the two. Additionally, because Robinson discloses “standard” and “non-standard” colorants, the Examiner believes Robinson does clearly distinguish and divisional between the two operational resources. The Examiner believes that Robinson discloses the standard printing features and the enhanced printing features, and therefore, Robinson teaches presently recited claims.

The Applicant also submits that Robinson fails to teach or suggest a charge calculated as a function of the request for the user or right of an “enhanced printer operational resource.” Specifically, the Applicant submits that the cost in Robinson et al. is calculated as a function of all operational resource requests (i.e., the amount of materials consumed, the paper used, and the type of finishing coatings), not just those resource requests utilizing what may be characterized as “enhanced” operational resources. However, the Examiner respectfully submits that Robinson discloses that the cost of the materials to be consumed is based on the change of the at least one image processing parameters. Although the cost also includes standard features, the cost is still calculated as a function of enhanced printer operational resources because the cost also depends on special materials used, such as special colorants. As described above, Robinson discloses that using black to replace the CMY in a color image by UCR results in a less expensive print (col 7,

lines 21-25). Such disclosure shows that by using the CMY color, the cost of the printing is increased, and therefore, the cost of the printing depends on the use of the CMY color. Since the CMY color is an enhancement used for the printing job, Robinson shows that the cost is calculated as a function of the request of an enhanced printer operational resource. Although the cost includes the core printer operational resources, the claim does not recite that the charge only includes the enhanced printer operational resource request. According to the present claims, the claims recite that the charge is calculated as a function of the enhanced printer operational resource, but the claims do not recite that the charge eliminates the charge of the core printer operational resource. Therefore, the Examiner believes that Robinson still reads on the recited claims.

Furthermore, the Applicant submits that the differences between core resources and enhanced resources are clearly set out in the specification, and that the application describes dividing printer resources into layers to stratify price levels and states, “A core layer 70 contains the basic printer resource needed to print standard output, e.g., frequently used resources, for which there is no fee.” However, the Examiner respectfully submits that there is no explanation or recitation of “a core layer” in the claims, and the claims do not describe what this “layer” is composed of. The Examiner also submits that there is no mention in the claim about the standard output being a frequently used resource for which there is no fee. Without such specific limitation in the claims, the Examiner believes that Robinson remains to teach the claims in the present application status.

Therefore, claims 1, 9 and 19 remain rejected as set forth in this office action.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kumiko C. Koyama whose telephone number is 571-272-2394. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*Kumiko C. Koyama*  
Kumiko C. Koyama  
October 30, 2006



MICHAEL G. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800